

Is Eating Outside the Home Associated with Gastrointestinal Illness?

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Background It is estimated that 46% of the U.S. food budget is spent on food eaten outside the home. Of 2,751 foodborne disease outbreaks reported to CDC from 1993 to 1997, 43% were associated with restaurants. Previous case-control studies have shown that eating undercooked meat, poultry and eggs outside the home are risk factors for many foodborne illnesses. The purpose of the study was to examine the association between eating outside the home and self-reported gastrointestinal illness in the general population.

Methods The FoodNet Population Survey was a random digit dialing survey of defined population in 9 sites (Colorado, Connecticut, Georgia, Maryland, Minnesota, Oregon, and portions of California, New York, and Tennessee) administered from March 2002 through February 2003. The survey included questions about food consumption and eating outside the home in the week prior to interview; gastrointestinal illness in the month prior to interview; and demographic characteristics. Analysis was limited to respondents = 18 years of age.

Results Of 14,059 completed interviews, 85% said that they ate outside the home at least once in the previous week. Of these, 3.3% reported having a gastrointestinal illness in the week prior to interview, compared to 2.4% of those who did not eat outside the home in the previous week (Chi-square test = 4, $p < 0.05$). A higher proportion of persons who ate at a fast-food restaurant in the previous week reported gastrointestinal illness compared to those who did not (3.9% vs 2.5%, chi-square test = 18.5, $p < 0.01$). A higher proportion of persons who ate at a deli/sandwich shop in the previous week reported more gastrointestinal illness than those who did not (4.1% vs 2.8%, chi-square test = 13.9, $p < 0.01$).

Conclusions These data indicate that persons who reported eating outside the home in the week prior to interview also reported more gastrointestinal illness in the week prior to interview. The potential association between frequency of eating outside the home and gastrointestinal illness should be more closely examined.